

REMARKS

Claims 1-8 are pending; claims 3,5, 6 and 8 have been amended. The examiner is respectfully requested to enter the amendments since they do not raise any new issues that would require a new search or further consideration and they clearly make the claims patentable.

The allowability of claims 1-7 is noted with appreciation.

The 112 rejections of claims 1-8 are believed to have been overcome by the above amendments. Specifically, claims 3, 5 and 6 have been amended as kindly suggested by the examiner. The amendment to claim 8 now recites and a positive step of destabilizing and purifying styrene and a limitation requiring the absence of other polymerization inhibitors.

The rejection of claim 8 as being obvious over Applicants Disclosure of admitted prior art is also believed to have been overcome by the amendments to claim 8. Since claim 8 now explicitly excludes stabilizers other than 4-tert-butylcatechol, none of the art of record suggests or teaches the claimed process.

Favorable action by the examiner is respectfully solicited.

Please charge any shortage in fees due in connection with the filing of this paper, including Extension of Time fees to Deposit Account No. 11-0345. Please credit any excess fees to such deposit account.

Respectfully submitted,

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MARKED-UP VERSION SHOWING CHANGES MADE

Please amend claims 3, 5, 6 and 8 as follows:

3. (currently amended) A process as defined in claim 1, wherein the 4-tert-butylcatechol is fed to a distillation assembly concurrently with the vinyl aromatic monomer, the concentration of 4-tert-butylcatechol in the bottom mixture of the distillation assembly being in the range of from 200 to 15,000 ppm based on the vinyl aromatic monomer.
5. (currently amended) A process as defined in claim 1, wherein ~~an~~ the oxygen-containing gas is metered into the bottom mixture of ~~the~~ a distillation assembly through a gas spray.
6. (currently amended) A process as defined in claim 1, wherein ~~an~~ the oxygen-containing gas is metered in on the suction side of a circulating pump mounted upstream of a distillation assembly.
8. (currently amended) A process for the destabilization and purification of styrene ~~stabilized with~~ containing 4-tert-butylcatechol, ~~wherein styrene is evaporated~~ comprising the step of evaporating the styrene in the presence of oxygen or an oxygen-containing gas ~~without addition of further~~ in the absence of other polymerization inhibitors.

COMPLETE LISTING OF ALL CLAIMS IN THE APPLICATION

1. (previously amended) A process for the distillation of vinyl aromatic monomers in the presence of 4-tert-butylcatechol (TBC) and oxygen or an oxygen-containing gas wherein no aromatic nitro or amino compound is present in any effective amount to prevent polymerization.
2. (previously amended) A process as defined in claim 1, wherein the vinyl aromatic monomer used is styrene.
3. (currently amended) A process as defined in claim 1, wherein the 4-tert-butylcatechol is fed to a distillation assembly concurrently with the vinyl aromatic monomer, the concentration of 4-tert-butylcatechol in the bottom mixture of the distillation assembly being in the range of from 200 to 15,000 ppm based on the vinyl aromatic monomer.
4. (previously amended) A process as defined in claim 1, wherein the distillation is carried out under vacuum at temperatures ranging from 40° to 125°C.
5. (currently amended) A process as defined in claim 1, wherein the oxygen-containing gas is metered into the bottom mixture of a distillation assembly through a gas spray.
6. (currently amended) A process as defined in claim 1, wherein the oxygen-containing gas is metered in on the suction side of a circulating pump mounted upstream of a distillation assembly.
7. (previously amended) A process as defined in claim 1, wherein the oxygen is fed in

at a rate of from 0.01 to 0.5 wt%, based on the weight of vinyl aromatic monomer.

8. (currently amended) A process for the destabilization and purification of styrene containing 4-tert-butylcatechol, comprising the step of evaporating the styrene in the presence of oxygen or an oxygen-containing gas in the absence of other polymerization inhibitors.